

***LineUp With Math™* Alignment**
Priority Academic Student Skills
Process Standards

Process Standard 1: Problem Solving

1. Use problem-solving approaches (e.g., act out situations, represent problems with drawings and lists, use concrete, pictorial, graphical, oral, written, and/or algebraic models, understand a problem, devise a plan, carry out the plan, look back)	<i>LineUp With Math™</i> Activities --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
2. Formulate problems from everyday and mathematical situations (e.g., how many forks are needed?, how many students are absent?, how can we share/divide these cookies?, how many different ways can we find to compare these fractions?).	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
3. Develop, test, and apply strategies to solve a variety of routine and nonroutine problems (e.g., look for patterns, make a table, make a problem simpler, process of elimination, trial and error).	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

Process Standard 2: Communication

1. Express mathematical ideas coherently and clearly to peers, teachers, and others (e.g., with verbal ideas, models or manipulatives, pictures, or symbols).	<i>LineUp With Math™</i> Activities --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
---	--

Process Standard 3: Reasoning

1. Explain mathematical situations using patterns and relationships (e.g., identify patterns in situations, represent patterns in a variety of ways, extend patterns to connect with more general cases).	<i>LineUp With Math™</i> Activities --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
3. Make predictions and draw conclusions about mathematical ideas and concepts. Predictions become conjectures and conclusions become more logical as students mature mathematically.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Process Standard 4: Connections

4. Use mathematical strategies to solve problems that relate to other curriculum areas and the real world (e.g., use a timeline to sequence events, use	<i>LineUp With Math™</i> Activities --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
---	---

<p>symmetry in art work, explore fractions in quilt designs and to describe pizza slices).</p>	
Process Standard 5: Representation	
<p>1. Create and use a variety of representations appropriately and with flexibility to organize, record, and communicate mathematical ideas (e.g., dramatizations, manipulatives, drawings, diagrams, tables, graphs, symbolic representations).</p>	<p><i>LineUp With Math™ Activities</i></p> <p>--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.</p>
<p>2. Use representations to model and interpret physical, social, and mathematical situations (e.g., counters, pictures, tally marks, number sentences, geometric models; translate between diagrams, tables, charts, graphs).</p>	<p>--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.</p>